

Kittiwake Vessel-to-Reef Remediation Observations and Subsequent Documentation

During the recent Kittiwake walkthrough from June 14 - 18, 2010, issues pertaining to vessel remediation and subsequent documentation were discussed (see below for details). The issues discussed only represent a small subset of the cleanup actions and documentation information needed to satisfy the clean up goals of the “*National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs (BMP Guidance)*, May 2006” and the Toxic Substance Control Act export provisions, and are presented here to hopefully avoid confusion/delays in the cleaning and documenting of the Kittiwake vessel-to-reef project to the appropriate levels.

Vessel-to-Reef Remediation Observations

- If machinery such as a diesel powered generator is brought onboard for use during vessel cleanup, spill cleanup kits and drip pans should be onboard to address a fuel leak or spill.
- Electrical equipment being salvaged for static display must be cleaned of all wires, cables, motors, transformers, capacitors or other internal electrical components. If the electrical equipment is intended to stay onboard, it must be cleaned of all wires, cables, motors, transformers, capacitors or other internal electrical components or removed entirely from the ship. This includes the two searchlights currently stored in the compartment near the aft steering gear compartment.
- Remove all mercury thermostats, thermometers and/or other Mercury containing devices such as barometers and pressure gauges.

Documentation for achieving the *BMP Guidance* clean up goals¹

- As an appendix to the *BMP Guidance* documentation, please provide a bulleted list of work that was conducted after the EPA walkthrough was completed on Friday, June 18 (e.g., oil clean-up in engine room, additional steam cleaning of winches to remove oil/grease, removal of non-skid floor, hull cleaning, removal of rubber gaskets during dry docking, removal of sonar cable during dry docking, cleaning of oil dripping down wall in room adjacent to shaft alley, etc.). Also, please include and identify any work done to address concerns raised by third party inspectors.
- Please indicate that there will be wood remaining onboard for the sinking (the wood component in the plotter table) and provide information regarding the maintenance plan for such wood.
- EPA was told that placing the engines back on the ship will no longer take place. Because it has been mentioned in previous status reports that the engines would be placed back in the engine room for sinking, please provide a sentence under the appropriate chapter that the engines have been removed from the vessel.
- Indicate what the remediation option is for inner compartment floors that were peeling/separating from the floor (such as in crew’s quarters).
- Please provide a list of items that will remain on the vessel for the tow and that will be removed once in the Cayman Islands prior to the vessel sinking (search/spot lights, wooden

¹ A recommended checklist for documenting vessel cleanup using the *BMP Guidance* can be found in Appendix F of the *BMP Guidance*. The *BMP Guidance* can be accessed at <http://www.epa.gov/owow/oceans/habitat/artificialreefs/finalguidance.html>. Appendix F of the *BMP Guidance* can be accessed at <http://www.epa.gov/owow/oceans/habitat/artificialreefs/documents/appendixf.html>.

hand rails, anchors for static display, etc.). Please include these items to be inspected by the third party.

- Provide a description of the removal of the sonar cables and how the resulting cavity was resealed.
- Provide a description of the removal of the sea cocks and sea chest gaskets and how the resulting cavities were resealed.
- Include a brief description of power washing the vessel hull to remove exfoliating paint.

Before and after photos

- Hull cleaning (for invasive species and removal of exfoliating paint)
- Cable removal in sonar room and sealing of cavities after removal
- Rubber gasket removal from sea chests and removal of sea cocks and the sealing of cavities after removal
- The “gutting” of the searchlights (cleaned of all wires, cables, motors, transformers, capacitors or other internal electrical components)
- Removal of large motor in propulsion room